What is claimed is:

1.   A method of selectively storing digital images in a memory, the memory being connected to a processor, the processor being connected to a digital image source, the

5   method comprising:

    storing, in the memory, a plurality of digital images received from the source, each image representing an event captured at a different respective time;

    using the processor to perform an analysis of the images;

    assigning a quality factor to each image, the quality factor being representative

10   of the composition quality of the analysed images; and

    updating the memory to maintain images for which the assigned quality factor indicates a higher composition quality than an image captured at an earlier time.

2.   A method according to claim 1, wherein first and second images are stored, the

15   second image being captured after the first image, the step of updating the memory comprising deleting the first image if its assigned quality factor indicates a lower composition quality than that assigned to the second image.

3.   A method according to claim 1 or claim 2, wherein the step of analysing the

20   image content comprises identifying sets of images having similar appearance by means of comparing an image acquired at a time t1 with an image acquired prior to t1, the step of updating the memory being performed separately for each identified set of images having similar appearance.

25   4.   A method according to claim 1 or claim 2, wherein the step of analysing the images comprises identifying at least one portion of the image, comparing the or each portion with an equivalent portion of a previously acquired image to identify images having similar appearance, the step of updating the memory being performed separately for images of a similar appearance.

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5.   A method according to claim 4, wherein, in the step of analysing the images, the at least one portion of the image to be compared is established by means of (i)

identifying at least one area of interest in the image, and (ii) tracking the motion of said at least one area of interest over subsequent images.

6. A method according to claim 5, wherein the step of identifying said at least one area of interest comprises segmenting the image into regions having generally consistent texture.

7. A method according to claim 5, wherein the step of identifying said at least one area of interest comprises segmenting the image into regions having generally consistent colour.

8. A method according to claim 5, wherein the step of identifying said at least one area of interest comprises segmenting the image into regions having generally consistent texture and colour.

9. A method according to claim 5, wherein the step of analysing the images further comprises identifying at least one subject area of interest, and wherein, in the step of assigning a quality factor to each image, the quality factor is representative of the composition quality of said at least one subject area of interest.

10. A method according to claim 9, wherein, in the step of identifying said at least one subject area of interest, said at least one subject area of interest is identified as being located generally in the centre of the image.

11. A method according to claim 9, wherein, in the step of identifying said at least one subject area of interest, said at least one subject area of interest is identified according to identification tags situated on particular subjects.

12. A method according to claim 11, wherein different tag types are provided for different groups of subjects, said at least one subject area of interest being categorised according to the tag type identified.

13. A method according to claim 9, wherein, in the step of identifying said at least one subject area of interest, human facial features are identified as comprising said at least one subject area of interest.

5 14. A method according to claims 9, wherein the quality factor is determined according to the size of said at least one subject area of interest, the composition quality increasing with the size of said at least one subject area of interest.

15. A method according to claim 9, wherein the quality factor is determined
10 according to the spatial separation of said at least one subject area of interest with respect to other parts of the image having a high relative motion, the composition quality increasing with the amount of spatial separation.

16. A method according to claim 9, wherein the quality factor is determined
15 according to the presence of said at least one area of interest at the edges of the image, the composition quality decreasing in the presence of said at least one area of interest at the image edges.

17. A method according to claim 13, wherein the quality factor is determined
20 according to the presence of said at least one area of interest obscuring said at least one identified facial subject area of interest, the composition quality decreasing according to the degree that said at least one facial subject area is obscured.

18. A method according to claim 13, wherein the quality factor is determined
25 according to the orientation of said at least one identified facial subject area of interest, the composition quality increasing if there is at least one identified facial subject area where most of the face is visible in the image.

19. A method according to claim 13, wherein the quality factor is determined
30 according to the orientation of said at least one identified facial subject area of interest, the composition quality increasing if there are two identified facial subject areas whose orientations face one another.

20.   A method according to claim 13, wherein the quality factor is determined according to the orientation of said at least one identified facial subject area of interest, the composition quality increasing if there is at least one identified facial subject area where most of the face is visible in the image and there are two identified facial subject areas whose orientations face one another.

21.   A method according to claim 13, wherein the quality factor is determined according to recognition of said at least one facial subject area of interest, the composition quality increasing if there is a facial subject area in the image which is identified as being present in a database of previously-stored facial features.

22.   A method according to claim 4, wherein, in the step of storing images received from a source, the images are divided into first and second groups, the first group comprising images received at a first data rate and a first resolution and the second group comprising images received at a second data rate and a second resolution, the second data rate being greater than that of the first data rate, and the second resolution being less than that of the first resolution, and wherein, in the step of analysing the images, the or each portion of the image to be compared is established by means of tracking the motion of the said at least one area of interest using images of the second group, the resulting quality factor being assigned to a preceding image of the first group.

23.   A method according to claim 3, wherein the digital image source includes a position sensor for outputting a sensor signal indicating the spatial position of the digital image source, and wherein, in the step of identifying images having similar appearance, the sensor signal is used to determine whether the digital image source has previously captured an image of a similar view.

24.   A computer program stored on a computer usable medium, the computer program comprising computer readable instructions for causing a computer to execute steps in a method of selectively storing digital images in a memory, the memory being

connected to a processor which is connected to a digital image source, the method comprising the steps of:

storing, in the memory, a plurality of digital images received from the source, each image representing an event captured at a different respective time;

5   using the processor to perform an analysis of the image content;

assigning a quality factor to each image, the quality factor being representative of the composition quality of the analysed images; and

updating the memory to maintain images for which the assigned quality factor indicates a higher composition quality than an image captured at an earlier time.

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25.   A system for selectively storing digital images, the system comprising: a processor connected to a digital image source by means of a video input port; and a memory connected to the processor, wherein the processor is arranged to store, in the memory, a plurality of digital images received from the source by means of the video

15   input port, each image representing an event captured at a different respective time, the processor being arranged to perform an analysis of the images and to assign a quality factor to each image, the quality factor being representative of the composition quality of the analysed images, the processor being further arranged to update the memory to maintain images for which the assigned quality factor indicates a higher composition

20   quality than an image captured at an earlier time.

26.   A camera system for selectively storing digital images, the camera system comprising: a processor; a memory connected to the processor; and an image capture system connected to the processor, the processor being arranged to store, in the

25   memory, a plurality of digital images received from the image capture system, each image representing an event captured at a different respective time, the processor being arranged to perform an analysis of the images and to assign a quality factor to each image, the quality factor being representative of the composition quality of the analysed images, the processor being further arranged to update the memory to maintain images

30   for which the assigned quality factor indicates a higher composition quality than an image captured at an earlier time.

27.   A method of selectively storing digital images in a memory, the memory being connected to a processor, the processor being which is connected to a digital image source, the method comprising:

storing, in the memory, a plurality of digital images received from the source,

5   each image representing an event captured at a different respective time;

using the processor to perform an analysis of the images, the analysis including the step of identifying one or more sets of images having similar appearance by means of comparing the appearance of an image acquired at a time t_1 with the appearance of images acquired prior to t_1;

10   assigning a quality factor to each image, the quality factor being representative of the composition quality of the analysed images; and

updating the memory to maintain, for each set of images having similar appearance, images for which the assigned quality factor indicates a higher composition quality than an image, in that set of images, captured at an earlier time.

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28.   A method of selectively storing digital images in a memory, the memory being connected to a processor, the processor being connected to a digital image source, the method comprising:

storing, in the memory, a plurality of digital images received from the source,

20   each image representing an event captured at a different respective time;

using the processor to perform an analysis of the images, the analysis including the step of identifying at least one set of images, such that the images in each of the at least one sets have similar appearance, by means of identifying at least one area of interest within each image and comparing the at least one area of interest with at least

25   one area of interest within previously acquired images;

assigning a quality factor to each image in each of the at least one sets, the quality factor being representative of the composition quality of the analysed image content; and

updating the memory to maintain, for each set of images having similar

30   appearance, images for which the assigned quality factor indicates a higher composition quality than an image, in that respective image set, captured at an earlier time.

29.   A method according to claim 28, wherein the step of analysing the image content further comprises identifying at least one subject area of interest from the at least one area of interest, the assigned quality factor being representative of the composition quality of the or each subject area of interest.

30.   A method according to claim 29, wherein, in the step of identifying the at least one subject area of interest, the at least one subject area of interest is identified as being generally located in the centre of the image.

31.   A method according to claim 29, wherein, in the step of identifying the at least one subject area of interest, the at least one subject area of interest are identified according to identification tags situated on particular subjects.

32.   A method according to claim 29, wherein, in the step of identifying the at least one subject area of interest, human facial features are identified as comprising the at least one subject area of interest.

33.   A method of selectively storing digital images in a memory, the memory being connected to a processor, the processor being connected to a digital image source, the method comprising:

storing, in the memory, key-frame images received from the image source at a first data rate and first resolution, and, interleaved between the key-frame images, video images received from the image source at a second data rate and second resolution, the second data rate being greater than that of the first data rate and the second resolution being less than that of the first resolution, each key-frame image and video image representing an event captured at a different respective time;

using the processor to perform an analysis of the images, the analysis including the step of identifying at least one set of images, the images in the or each set have similar appearance, the step being performed by means of (a) identifying at least one area of interest within each key-frame image, (b) tracking the motion of the at least one area of interest using the video images following each key-frame image, and (c)

comparing the at least one area of interest with the at least one area of interest within previously acquired images;

assigning a quality factor to each key-frame image in each of the at least one sets, the quality factor being representative of the composition quality of the analysed key-frame images; and

updating the memory to maintain, for each set of images having similar appearance, key-frame images for which the assigned quality factor indicates a higher composition quality than an key-frame image, in each respective set, captured at an earlier time.